MEIGEN'S FIRST PAPER ON DIPTERA.

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Johann Wilhelm Meigen (1763–1845), was, says Schiner, "Incontestibly the first and greatest dipterologist of his time and all times." He had a good perception of generic characters, and had perhaps the first really comprehensive collection of European Diptera ever made upon which to exercise his talents. Added to these favouring conditions, he must also have had immense patience and tenacity to carry out through twenty years of almost continuous publication his monumental work. "Systematische Beschreibung der bekannten europäischen zweiflügligen Insekten."

Such being the prominence and reputation of Meigen, it is not surprising that considerable attention should be given to anything written by him. The paper from which many of his principal genera have been dated, and which most entomologists have supposed to be his earliest one, is entitled, "Versuch einer neuen Gattungs Eintheilung der europäischen zweiflügligen Insekten," and was published in Illiger's Magazin für Insektenkunde, Vol. II, pp. 259–281, in the year 1803. The article has a page of introduction by the editor, Illiger, calling attention to the fact that Meigen had already prepared a large amount of material for a comprehensive work on Diptera, and bespeaking for him the necessary financial support for its publication. The article itself contains no explanatory matter by Meigen, but merely gives short descriptions of 114 genera of Diptera, mostly new, with one or more typical or illustrative species mentioned in connection with most of them ; a considerable number, however, have no species mentioned.

That Meigen had already published another paper with a similar scope is nowhere mentioned or suggested in the 1803 article, but has been known for many years. Hagen lists it in his "Bibliotheca Entomologica," although he had not seen it. It has been referred to once or twice in literature, but has remained practically unknown until recently ; now, however, Mr. Fr. Hendel has published an extended article on it in the "Verhandlungen der kaiserlichen-königlichen zoologischen-botanischen Gesellschaft in Wien," 1908, 43–69. He quotes the generic descriptions in full and gives his ideas of their meaning. His own copy and the one in Osten Sacken's collection are the only ones known to Hendel. As Hagen mentions the paper as containing forty pages, it is evident that Hendel does not give it entire, but only the part which is important for

nomenclature. Not having seen the original, I am obliged to follow Hendel's data in the discussion which follows.

The title of the paper is "Nouvelle classification des Mouches á deux Ailes (Diptera L.) d'après un plan tout nouveau," and the date is "Paris an VIII," that is, the eighth year of the French Revolution, or 1800.

The work contains no mention of specific names at all in connection with the generic descriptions. The latter are brief, and in most cases in rather general terms, such as the number of joints in the antennæ, presence or absence of ocelli and tibial spurs, whether the wings are folded or divaricate in repose, etc. It is not to be denied, however, that occasional decisive characters are found, but not in many genera.

Hendel had great difficulty, as he admits, in determining the meaning or application of these generic names, until he received from Bezzi the happy suggestion that the 1803 paper contains most of the same matter translated into German, hence a comparison of the two would reveal the identity of the earlier ones. Following this out Hendel was enabled to trace the connection, and thus he learned that Meigen had changed nearly all of his generic names in 1803 from those he proposed in 1800. For instance, Flabellifera became Ctenophora; Petaurista became Trichocera; Zelmira, Platyura; Fungivora, Mycetophila; Lycoria, Sciara; Helea, Ceratopogon; Tendipes, Chironomus; Eulalia, Odontomyia; Noeza, Hybos; Clythia, Platypeza, and many others.

A glance at the names mentioned will indicate that Meigen had in the interim adopted a new principle in the formation of generic names, changing from Latin or Latin-sounding words to those derived somewhat rigorously from Greek roots. It is possible that he was troubled with doubts as to whether any generic term would "stand" if not derived from Greek; at any rate, the nature of the changes indicates what was his purpose.

Now, a few words as to the effect upon nomenclature of this newly-opened chapter of entomological history. Mr. Hendel asserts that the older names, as ascertained by the method of comparing the German translation of the 1800 paper with the 1803 paper, must replace the latter *in toto*, taking as types those assigned in 1803. He says, "As the reader of the following pages will observe, the acceptance of the old names of Meigen will create a complete revolution in dipterological nomenclature; this is, indeed, to be regretted, but is unfortunately unavoidable. *Fiat justitia, pereat mundus!*"

I am so far from coinciding in my views with Mr. Hendel that I must confess that the simplicity of his position is absolutely laughable.

I do not approach the question with the idea that two sets of names stand before the bar of justice with exactly equal claims upon our decision. The case is more nearly analogous to one that has several times arisen within a generation in the United States, when some persons have endeavoured to claim valuable tracts of real estate on the basis of transfers from Indian tribes a century or so ago. Even if the original transaction had occurred as claimed, the contestants will find that every possible presumption will be used against them, and justly so, to avoid the great practical wrong and hardship of upsetting titles to real estate. So in this case we ought to have no hesitancy in admitting that our attitude is that no old names like these can create a "revolution" unless they exhaust every legal technicality that we can throw in their way. This is not an unfair position. It does not involve an ultra-conservatism, nor does it involve a disregard of proper or generally-accepted rules of nomenclature. It does involve some comprehension of the value of stability in nomenclature, a subject on which many entomologists might cogitate long with profit.

Mr. Hendel does not cite any rules of nomenclature to justify his acceptance of the 1800 names. I will cite one to show why they should not be accepted; namely, article 25 of the International Code of 1904, which says, "The valid name of a genus or species can be only that name under which it was first designated on the condition (a) that this name was published and accompanied by an indication, or a definition, or a description; and (b) that the author has applied the principles of binary nomenclature."

Following this rule, I note as applying to (a) above, that the names in 1800 were not accompanied by an indication, and the definition or description (these two are practically synonymous terms) were as admitted by Hendel unrecognizable (with possibly a few exceptions) until studied in the light of the 1803 paper; they were therefore *nomina nuda*. Condition (a) was therefore not fulfilled in 1800. As to condition (b), if the author of a paper mentions only genera and no species, he does not apply a binary nomenclature.

Furthermore, Dr. Stiles gives as his individual rule (in his comments on the International Code, Hygienic Laboratory, Bull. 24, p. 27): "12a Rule.—The following species are excluded from consideration in selecting

the types of genera: (a) Species which were not included under the generic name at the time of its original publication." These names, therefore, have no types.

I should not deem the occasion to justify so lengthy a discussion on my part, but for the fact that Dr. Bezzi writes me that he is engaged on a research into the names proposed in Diptera prior to 1800, and that he has already found data sufficient to require the change of the great majority of names of the older genera now in use in the Diptera. A number of his conclusions have already been published. We seem to be entering upon a period of nomenclatural unrest, which may leave us as badly off in Diptera as we now are in Lepidoptera or Hemiptera, to say nothing of Orthoptera and a few others.

"Let justice be done, though the earth perish," says Mr. Hendel. But justice means nothing, except with reference to some person or thing. Justice to whom, or to what? Is it justice to Meigen to insist on the use of names that he himself discarded for better ones? Or is it justice to dipterology to overturn nomenclature to no purpose? The case before us is not Meigen versus some other ancient worthy, but Meigen versus Meigen. Justice to him has already been done, and it would be flagrant injustice to reopen the case.

PLATYSAMIA COLUMBIA NOKOMIS.

The handsome moth which occurs throughout Manitoba and the Northwest Provinces, and which has always been named in collections, *Samia columbia*, Smith, has such a different appearance from the Ontario form which seems to be the type, that I am of the opinion the name given by Dr. W. Brodie some years ago ought to be recognized. Dr. Henry Skinner has also examined this insect critically during the past summer, and agrees with me that Dr. Brodie's description which appeared in the Biological Review of Ontario for October, 1894, pp. 103–107, should be republished. This publication is not now available, and with Dr. Brodie's consent I send herewith an extract from his article on *Platysamia columbia nokomis*.—James Fletcher, Ottawa.

"Platysamia Columbia Nokomis.

"By wm. brodie.

"In the Canadian Entomologist, Vol. X, March, 1878, there is a very good coloured lithograph of the larva of *P. columbia*, by the late G. J. Bowles, and a short paper by the late F. B. Caulfield, giving a description of the larvæ. There is also on page 43 an article by C. H. Fernald,